

RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 03-0280358

THE APPLICATION OF PENWELL ENERGY, INC. TO ADOPT FIELD RULES FOR THE SOUR LAKE, E. (9920) FIELD, HARDIN COUNTY, TEXAS

HEARD BY:

Richard D. Atkins, P.E. - Technical Examiner

Marshall F. Enquist - Legal Examiner

HEARING DATE:

February 28, 2013

APPEARANCES:

REPRESENTING:

APPLICANT:

Dale E. Miller

Penwell Energy, Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

The Sour Lake, E. (9920) Field currently operates under Statewide Field Rules. Penwell Energy, Inc. ("Penwell") requests that Field Rules be adopted, as shown below:

- 1. Designated correlative interval from 9,960 feet to 9,984 feet as shown on the log of the Penwell Energy, Inc. - Vastar Fee Lease, Well No. 1 (API No. 42-199-32721):
- 2. 330'-660' well spacing:
- 3. 40 acre units with optional 20 acre density;
- Allocation based on 100% acres with a top oil allowable based on the 1965 4. Yardstick Allowable of 172 barrels of oil per day.

Penwell also requests that proration unit plats not be required for individual wells. but that Form P-15 be filed to designate the number of acres to be assigned to each well with no maximum diagonal limitation.

The application is unprotested and the examiners recommend that Field Rules be adopted for the Sour Lake, E. (9920) Field, as proposed by Penwell.

DISCUSSION OF EVIDENCE

The Sour Lake, E. (9920) Field was discovered in May 1982 at an average depth of 9,900 feet. There is one producing oil well carried on the proration schedules and the field operates under Statewide Field Rules. Penwell is the only operator in the field. Cumulative production from the field through December 2012 is 299.0 MBO and 767.1 MMCFG.

There is currently no defined correlative interval for the field. Penwell requests that the field be defined as the correlative interval from 9,960 feet to 9,984 feet as shown on the log of the Penwell Energy, Inc. - Vastar Fee Lease, Well No. 1 (API No. 42-199-32721), Section 411, B. Mancha Survey, A-573, Hardin County, Texas. The correlative interval includes the entire Yegua EY2 Sand formation.

Penwell is developing the Sour Lake, E. (9920) Field by drilling infill wells and requests Field Rules that will promote the efficient and effective development of the remaining hydrocarbons. From log analysis, Penwell estimated an average porosity of 22%, an average water saturation of 52%, an average net pay thickness of 10 feet and a recovery factor of 50%. The primary drive mechanism is a strong water drive. Penwell provided drainage area calculations for six wells that produced from the field. The drainage areas range from less than one acre up to a maximum of 63 acres. The average drainage area was calculated to be approximately 22 acres and four of the wells had drainage areas of 22 acres or less. Based on the drainage area calculations, Penwell requests 330'-660' well spacing and 40 acre units with optional 20 acre density.

Penwell also requests that proration unit plats not be required for individual wells, but that Form P-15 be filed to designate the number of acres to be assigned to each well with no maximum diagonal limitation. Penwell proposes that allocation be based on 100% acres with a top oil allowable based on the 1965 Yardstick Allowable of 172 barrels of oil per day.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Sour Lake, E. (9920) Field was discovered in May 1982 at an average depth of 9,900 feet.

- There is one producing oil well carried on the proration schedules and the field operates under Statewide Field Rules.
- b. Penwell Energy, Inc. is the only operator in the field.
- 3. The Sour Lake, E. (9920) Field should be defined as the correlative interval from 9,960 feet to 9,984 feet as shown on the log of the Penwell Energy, Inc. Vastar Fee Lease, Well No. 1 (API No. 42-199-32721), Section 411, B. Mancha Survey, A-573, Hardin County, Texas. The correlative interval includes the entire Yegua EY2 Sand formation.
- 4. Field Rules for the Sour Lake, E. (9920) Field that provide for 330'-660' well spacing and 40 acre units with optional 20 acre density is appropriate for the field.
 - a. Drilling infill wells will promote the efficient and effective development of the remaining hydrocarbons.
 - b. From log analysis, Penwell estimated an average porosity of 22%, an average water saturation of 52%, an average net pay thickness of 10 feet and a recovery factor of 50%. The primary drive mechanism is a strong water drive.
 - c. Penwell provided drainage area calculations for six wells that produced from the field. The drainage areas range from less than one acre up to a maximum of 63 acres.
 - d. The average drainage area was calculated to be approximately 22 acres and four of the wells had drainage areas of 22 acres or less.
- 5. Allocation based on 100% acres with a top oil allowable based on the 1965 Yardstick Allowable of 172 barrels of oil per day is appropriate for the Sour Lake, E. (9920) Field.
- 9. The filing of Form P-15 to designate the number of acres to be assigned to each well for proration purposes with no proration plats will eliminate unnecessary paperwork.

CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was issued.
- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.

3. Adopting Field Rules for the Sour Lake, E. (9920) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission adopt Field Rules for the Sour Lake, E. (9920) Field, as requested by Penwell Energy, Inc.

Respectfully submitted,

Richard D. Atkins, P.E.

Technical Examiner

Marshall F. Enquist

Legal Examiner